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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/743,903

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Yoon-Seop Choi

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STAAS & HALSEY LLP

SUITE 700

1201 NEW YORK AVENUE, N.W.

WASHINGTON, DC 20005

EXAMINER

SHIBRU, HELEN

ART UNIT

PAPER NUMBER

2621

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/743,903	<b>Applicant(s)</b> CHOI, YOON-SEOP	
	<b>Examiner</b> HELEN SHIBRU	<b>Art Unit</b> 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Applicant's Related art (paragraphs 0003-0005).

Regarding claim 1, Applicant's related art teaches an apparatus that generates a video-reproducing clock signal from a 480 p signal that includes a vertical synchronization signal, horizontal synchronization signals, and copy guard signals (see paragraphs 0003-0004), the apparatus comprising: a coast signal generating unit, which generates a plurality of coast signals with pulse widths, each of which covers the different number of copy guard signals on the basis of the present copy guard signal in one frame signal of the 480 p signal (see paragraph 0005); and a clock signal generating unit, which generates horizontal synchronization signals at the same period as that of the horizontal synchronization signals generated in a previous frame, while the corresponding coast signal is being generated (see paragraph 0005 while the coast signal is being generated artificial horizontal signals are generated with a regular period and input to the PLL).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3 and 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's related art in view of Irie US Pat. No. 5, 621, 475).

Although Applicant's related art teaches the limitation of claim 1, the related art fails to disclose a counter that counts falling edges of signals in the present frame signal of the 480 p signal; and a coast signal generator that generates n coast signals with n different pulse widths on the basis of the counted falling edges of signals.

In the same field of endeavor Irie teaches a counter that counts falling edges of signals in the present frame signal of the frame signal (see figure 1B, counter); and a coast signal generator that generates n coast signals with n different pulse widths on the basis of the counted falling edges of signals (see col. 1 lines 24-34 and col. 3 lines 19). Therefore in light of the teaching in Irie it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Applicant's related art by including a counter that counts edges and generating signals based on the counted edges in order to reduce noise.

Regarding claim 3, claim 3 differs from the proposed combinations of Applicant's prior art in that the claim further requires the coast signal generator generates a first coast signal with a pulse width that covers the number of falling edges and is less than 525, a second coast signal with a pulse width that covers the number of falling edges that ranges from 526 to 535, a third coast signal with a pulse width that covers the number of falling edges that ranges from 536 to 545, and a fourth coast signal with a pulse width that covers the number of falling edges that ranges from 546 to 558. Generating coast signal with a pulse width that covers the number of falling edges from 526-535, 536-545, 546-558 and less than 525 is not novel or produces

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unexpected result; therefore, merely considered as well known design option obvious to one of ordinary skill in the art because the construction of the apparatus provides no significant functional or patentable differences from the proposed combinations or applicant's apparatus.

Regarding claims 5 and 8, the limitation of claim 5 can be found in claims 1 and 2. Therefore claim 5 is analyzed and rejected for the same reasons as discussed in claims 1 and 2.

Claims 6 and 9 are rejected for the same reason as discussed in claim 2 above.

Claims 7 and 10 are rejected for the same reasons as discussed in claim 3 above.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being obvious over Applicant's related art in view of Kim (7, 015, 973).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

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Regarding claim 4, claim 4 differs from Applicant's related art in that the claim further requires the clock signal generating unit generates a phase-locked clock signal using the horizontal synchronization signals, included in the 480 p signal, while the coast signal is not being generated.

In the same field of endeavor Kim teaches the clock signal generating unit generates a phase-locked clock signal using the horizontal synchronization signals, included in the 480 p signal, while the coast signal is not being generated (see abstract, col. 2 lines 30-46 and col. 6 line 61-col. 7 line 5, and also figure 4). Therefore in light of the teaching in Kim it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Applicant's related art by generating PLL clock signal using horizontal sync while the coast signal is not being generated in order to control sampling clock signal.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELEN SHIBRU whose telephone number is (571)272-7329. The examiner can normally be reached on M-F, 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on (571) 272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HELEN SHIBRU/  
Examiner, Art Unit 2621  
September 11, 2009

/Thai Tran/  
Supervisory Patent Examiner, Art Unit 2621